

MODULE II - GENERAL FACILITY CONDITIONS

Page numbers will be updated when a revised permit is issued

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II. MODULE II - GENERAL FACILITY CONDITIONS

II.C. GENERAL WASTE ANALYSIS

II.C.1 Waste Analysis Plan

The Permittees shall not ~~manage, store, or dispose~~ TRU mixed waste at WIPP which fails to meet the ~~waste analysis characterization~~ requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.13), Section 311(a) of Pub. L. 108-137, and Section 310(a) of Pub. L. 108-447, as specified by this Permit.

The Permittees' WAP, as specified in Permit Attachment B, is approved subject to the following conditions:

II.C.1.a. Implementation of requirements:

- i.** ~~The~~ The Permittees shall require that generator/storage sites implement applicable requirements of the WAP, specified in Permit Attachment B, prior to the Permittees' receipt of TRU mixed waste from a generator/storage site.
- ii.** The Permittees shall obtain from the generator/storage sites the Waste Stream Profile Form (WSPF) and the Waste Analysis Information Summary (WAIS) including the Acceptable Knowledge (AK) Summary Report and source documentation as necessary. Approval of the WSPF shall, in accordance with Permit Attachments B and B7, Section B7-1a, be based on a determination that the TRU mixed waste meets the Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC) specified in Permit Conditions II.C.3.a. through II.C.3.h.
- iii.** The Permittees shall screen, verify, and examine TRU mixed waste shipments in accordance with Attachment B7, Section B7-1b, prior to storage or disposal at the WIPP.

II.C.1.b. ~~Waste analysis characterization sampling and analytical methods - the~~ Permittees shall require that generator/storage sites and Permittee approved laboratories comply with the applicable method requirements, quality control, equipment testing, inspection, maintenance, and equipment calibration and frequency standards for the procedures specified in Permit Attachment B1 (Waste Analysis Characterization Sampling Methods). For all analytical methods for waste analysis not

otherwise specified in Permit Attachment B1 or otherwise approved by the New Mexico Environment Department (NMED), the Permittees shall require the generator/storage sites and Permittee approved laboratories to use "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846. Updates to EPA Publication SW-846 shall be incorporated into this permit by reference. Sites may use these new or revised methods once they have demonstrated that the results from the new methods will be at least equivalent to the results from the currently used methods.

II.C.1.c. Statistical methods used in sampling and analysis - the Permittees shall require that generator/storage sites use the methods for statistically selecting retrievably stored and newly-generated TRU mixed waste containers for ~~visual examination and~~ volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and total metals analysis, and establishing upper confidence limits, and, when demonstrated appropriate, control charting for newly-generated waste stream sampling radiography as specified in Permit Attachment B2 (Statistical Methods Used in Sampling and Analysis).

II.C.1.d. Quality assurance objectives - the Permittees shall require that all TRU mixed waste analysis~~characterization~~ activities used by generator/storage sites and Permittee approved laboratories comply with the appropriate quality assurance objectives (QAOs) specified in Permit Attachment B3 (Quality Assurance Objectives and Data Validation Techniques for Waste Analysis~~Characterization~~ Sampling and Analytical Methods). The Permittees shall require generator/storage sites to review, validate, and verify all analytical data; reconcile analytical results with data quality objectives (DQOs); satisfy data reporting requirements; and identify, document, and report all nonconformances and operational variances in compliance with Permit Attachment B3.

II.C.1.e. Acceptable knowledge - the Permittees shall require generator/storage sites to assemble acceptable knowledge documentation and ~~confirm acceptable knowledge determinations, and~~ shall audit (as specified in Permit Condition II.C.2) all aspects of the acceptable knowledge waste ~~characterization~~analysis process as specified in Permit Attachment B4 (TRU Mixed Waste ~~Characterization~~Analysis Using Acceptable Knowledge).

II.C.1.f. Quality assurance - the Permittees shall require each generator/storage site and Permittee approved laboratory to develop and implement a

quality assurance project plan (**QAPjP**) which demonstrates compliance with, and implementation of, applicable requirements of the WAP, Permit Attachment B, as specified in Permit Attachment B5 (Quality Assurance Project Plan Requirements).

II.C.1.g. WIPP Waste Information System (WWIS) database - the Permittees shall provide the Secretary access to the WWIS database as necessary to determine compliance with the WAP. The WWIS shall meet all requirements presented in Permit Attachment B7, Section B7-1a(2) 4b(1)(i) of the WAP, Permit Attachment B, prior to storage or disposal acceptance of TRU mixed waste at the WIPP. The Secretary's access to the WWIS shall be direct, read-only (via modem or Internet) to all query and reporting functions of the **Characterization**, Certification, Shipping, and Inventory modules of the WWIS database.

II.C.1.h. Permittee Level TRU Mixed Waste Approval and Acceptance Processes - The Permittees shall conduct TRU mixed waste stream screening, verification, and examination as specified in Permit Attachment B7 (Permittee Level TRU Mixed Waste Approval and Acceptance Processes) prior to storage or disposal at the WIPP. These processes ensure that the TRU mixed waste stored and disposed at the WIPP contains no ignitable, corrosive or reactive waste and that the assigned Environmental Protection Agency hazardous waste numbers are permitted as specified in Permit Condition II.C.4.

II.C.2. Audit and Surveillance Program

The Permittees shall not manage, store, or dispose TRU mixed waste at WIPP from a generator/storage site until the following conditions have been met as necessary for the Secretary to determine that the applicable waste analysis ~~characterization~~ requirements of Permit Condition II.C.1 have been implemented:

II.C.2.a. Requirement to audit - the Permittees shall demonstrate to the Secretary that the generator/storage sites and Permittee approved laboratories (when applicable) have implemented and comply with applicable requirements of the WAP by conducting ~~an audits of the~~ generator/storage sites as specified in Permit Attachment B7, Section B-4b(1)(iii) ~~B7-1a(1)~~, and Permit Attachment B6 (Waste Isolation Pilot Plant Permittees' Audit and Surveillance Program), and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.13).

1 II.C.2.b. Observation of audit - the Secretary may observe such audits as
2 necessary to validate the implementation of and compliance with
3 applicable WAP requirements at each generator/storage site and
4 Permittee approved laboratory. The Permittees shall provide the
5 Secretary with a current audit schedule on a monthly basis and notify the
6 Secretary no later than thirty (30) calendar days prior to each audit.

7
8 II.C.2.c. Final audit report - the Permittees shall provide the Secretary a final
9 audit report as specified in Permit Attachment B6. The final audit report
10 shall include all information specified in Permit Attachment B6, Section
11 B6-4, and:

12
13 i. A detailed description of all corrective actions and the resolution
14 of any corrective action applicable to WAP requirements,
15 including re-audits if required;

16
17 ii. All documentation necessary for the Secretary to determine if
18 the corrective action was resolved.

19
20 II.C.2.d. Secretary notification of approval - the Secretary shall approve the
21 Permittees' final audit report by written notification to the Permittees
22 that the applicable characterization requirements of the WAP at a
23 generator/storage site and Permittee approved laboratory (when
24 applicable) have been implemented.

25
26 II.C.3. Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC)

27
28 The Permittees shall not accept TRU mixed wastes at WIPP for storage, ~~management~~, or disposal
29 which fail to meet the treatment, storage, and disposal facility waste acceptance criteria as
30 presented in Permit Conditions II.C.3.a through ~~II.C.3.k~~ II.C.3.j, of this Permit.

31
32 II.C.3.a. Liquids - liquid waste is not acceptable for storage or disposal at the
33 WIPP. Waste shall contain as little residual liquid as is reasonably
34 achievable by pouring, pumping and/or aspirating, and internal
35 containers shall contain less than 1 inch or 2.5 centimeters of liquid in
36 the bottom of the container. Total residual liquid in any payload
37 container (e.g., 55-gallon drum, standard waste box, etc.) may not
38 exceed 1 percent volume of that container.

39
40 II.C.3.b. Pyrophoric materials - non-radionuclide pyrophoric materials, such as
41 elemental potassium, are not acceptable for storage or disposal at the
42 WIPP.

- 1 II.C.3.c. Non-mixed hazardous wastes - hazardous wastes not occurring as co-
2 contaminants with TRU wastes (non-mixed hazardous wastes) are not
3 acceptable for storage or disposal at the WIPP.
4
- 5 II.C.3.d. Chemical incompatibility - wastes incompatible with backfill, seal and
6 panel closures materials, container and packaging materials, shipping
7 container materials, or other wastes are not acceptable for storage or
8 disposal at the WIPP.
9
- 10 II.C.3.e. Explosives and compressed gases - wastes containing explosives or
11 compressed gases are not acceptable for storage or disposal at the WIPP.
12
- 13 II.C.3.f. PCB waste - wastes with polychlorinated biphenyls (**PCBs**) not
14 authorized under an EPA PCB waste disposal authorization are not
15 acceptable for storage or disposal at the WIPP.
16
- 17 II.C.3.g. Ignitable, corrosive, and reactive wastes - wastes exhibiting the
18 characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous
19 Waste Numbers of D001, D002, or D003) are not acceptable for storage
20 or disposal at the WIPP.
21
- 22 II.C.3.h. Remote-handled transuranic waste - remote-handled (**RH**) TRU mixed
23 waste (waste with a surface dose rate of 200 millirem per hour or
24 greater) is not acceptable at WIPP.
25
- 26 H.C.3.i. Excluded Waste - TRU mixed waste that has ever been managed as high-level
27 waste and waste from tanks specified in Permit Attachment B are not acceptable
28 at WIPP unless specifically approved through a Class 3 permit modification.
29 Such wastes are listed in Table II.C.3.hi. below.
30

31 **Table II.C.3.hi - Additional Approved Waste Streams**

Date Class 3 Permit Modification Request Approved	Description of Waste Stream

- 32
33
34
35
36
37
38
39 H.C.3.j. ~~Headspace gas sampling and analysis~~ any waste container that does not
40 have VOC concentration values reported for the headspace is not

acceptable at WIPP.

II.C.3.k.i. Radiographic / visual examination - any waste container from a waste stream (or waste stream lot) which has not undergone either radiographic or visual examination of a statistically representative subpopulation of the waste as described in Permit Attachment B7, Section B7-1b, is not acceptable for storage or disposal at the WIPP.

II.C.3.l.i. Waste stream profiles - any waste container from a waste stream which has not been preceded by an appropriate, certified Waste Stream Profile Form (Attachment B, Figure B-1) is not acceptable for storage or disposal at the WIPP.

II.C.5. Derived Waste

Any WIPP-generated waste derived from adequately analyzed characterized, WIPP-accepted TRU mixed waste generated at an off-site facility (*derived waste*) does not need to be additionally analyzed characterized for hazardous waste components if the Permittees use the generator's waste analysis characterization data and knowledge of the processes at the WIPP facility to identify and analyze characterized derived waste. Derived waste containers shall be managed according to Permit Attachment M1, Section M1-1d(1), and meet all TSDF waste acceptance criteria in Permit Condition II.C.3 prior to disposal at WIPP.

II.G. GENERAL REQUIREMENTS FOR HANDLING IGNITABLE, CORROSIVE, REACTIVE, OR INCOMPATIBLE WASTES

The Permittees shall not ~~manage~~ store or dispose of ignitable, corrosive, reactive, or incompatible wastes, as defined in 20.4.1.200 NMAC (incorporating 40 CFR §§261.21, 261.22, and 261.23) and 20.4.1.500 NMAC (incorporating 40 CFR §264 Appendix V) within the permitted units. The Permittees shall comply with the procedures to prevent acceptance of ignitable, corrosive, reactive, and incompatible waste specified in Permit Conditions II.C.1 and II.C.3.

PERMIT ATTACHMENTS

Permit Attachment B (as modified from WIPP RCRA Part B Permit Application, "Waste Analysis Plan" - Chapter C).

Permit Attachment B1 (as modified from WIPP RCRA Part B Permit Application, "Waste ~~Characterization~~ Analysis Sampling Methods" - Appendix C4).

Permit Attachment B2 (as modified from WIPP RCRA Part B Permit Application, "Statistical Methods Used in Sampling and Analysis" - Appendix C6).

Permit Attachment B3 (as modified from WIPP RCRA Part B Permit Application, "Quality Assurance Objectives and Data Validation Techniques for Waste ~~Characterization Sampling and Analytical Methods~~ Analysis" - Appendix C8).

Permit Attachment B4 (as modified from WIPP RCRA Part B Permit Application, "TRU Waste ~~Characterization~~ Analysis Using Acceptable Knowledge" - Appendix C9).

Permit Attachment B5 (as modified from WIPP RCRA Part B Permit Application, "Quality Assurance Project Plan Requirements" - Appendix C10).

Permit Attachment B6 (as modified from WIPP RCRA Part B Permit Application, "Waste Isolation Pilot Plant Generator/Storage Site Waste Screening and Acceptance Audit Program" - Appendix C11).

Permit Attachment B7 (as first included from the Class 3 permit modification addressing Section 311 Pub. L. 108-137, Section 310 Pub. L. 108-447, and Remote Handled Waste).

Permit Attachment C (as modified from WIPP RCRA Part B Permit Application, "Procedures to Prevent Hazards" - Chapter F).

Permit Attachment D (as modified from WIPP RCRA Part B Permit Application, "Procedures to Prevent Hazards" - Chapter F).

Permit Attachment E (as modified from WIPP RCRA Part B Permit Application, "Procedures to Prevent Hazards" - Chapter F).

Permit Attachment F (as modified from WIPP RCRA Part B Permit Application, "RCRA Contingency Plan" - Chapter G).

Permit Attachment H (as modified from WIPP RCRA Part B Permit Application, "Personnel

1 Training" - Chapter H).

2
3 Permit Attachment H1 (as modified from WIPP RCRA Part B Permit Application, "List of
4 Hazardous Waste Management Job Titles" - Appendix H1, and "Waste Isolation Pilot Plant
5 RCRA Hazardous Waste Management Functional Job Descriptions" - Appendix H2).

6
7 Permit Attachment H2 (as modified from WIPP RCRA Part B Permit Application, "Training
8 Course and Qualification/Certification Card Outlines" - Appendix H3).

9
10 Permit Attachment I (as modified from WIPP RCRA Part B Permit Application, "Closure Plans,
11 Post-Closure Plans, and Financial Requirements" - Chapter I).

12
13 Permit Attachment I1 (as modified from WIPP RCRA Part B Permit Application, "Technical
14 Specifications, Panel Closure System, Waste Isolation Pilot Plant" - Appendix I1).

15
16 Permit Attachment I2 (as modified from WIPP RCRA Part B Permit Application, "Shaft Sealing
17 System Compliance Submittal Design Report" - Appendix 2).

18
19 Permit Attachment J (as modified from WIPP RCRA Part B Permit Application, "Closure Plans,
20 Post-Closure Plans, and Financial Requirements" - Chapter I).

21
22 Permit Attachment J1 (as modified from WIPP RCRA Part B Permit Application, "Active
23 Institutional Controls" - Appendix I4).

24
25 Permit Attachment O (as modified from WIPP RCRA Part B Permit Application, "Hazardous
26 Waste Permit Application Part A" - Chapter A).